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### REMARKS

Applicant respectfully requests reconsideration. Claims 1-5, 11, 18, and 23-27, including independent claims 1, 11, 18, 23, 25, and 26, are pending in this application. Claim 28 has been cancelled. Claims 1, 11, and 26 have been amended. No new matter has been added.

#### I. Interview with the Examiner

Applicants' representative, Melissa A. Beede, thanks Examiner Chin for his courtesy in granting and conducting a telephone interview held on October 3, 2005. During the interview, Applicants' representative discussed with the Examiner the rejections of the independent claims. The substance of the telephone interview is summarized in the remarks presented herein.

#### II. Double Patenting Rejection

Claims 1-2, 4-5, 11, 18, and 25-28 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3, and 6-8 of U.S. Patent No. 6,461,568 (Eckhardt). A terminal disclaimer is submitted herewith to obviate this rejection. Accordingly withdrawal of the rejection is respectfully requested.

#### III. Rejection Under 35 U.S.C. §112

Claim 28 was rejected under 35 U.S.C. §112, second paragraph, as lacking antecedent basis for "the light seal." Claim 28 has been cancelled, and the rejection is now moot. Accordingly, withdrawal of this rejection is respectfully requested.

#### IV. Rejections Under 35 U.S.C. §102

Independent claims 1, 23, 25, and 26 were rejected under 35 U.S.C. 102(b) as being anticipated by Matschke (U.S. Patent No. 5,498,394). Independent claim 25 was also rejected as being anticipated by Chu (U.S. Patent No. 5,126,572). Claims 1 and 26 have been amended to more clearly distinguish over the prior art of record. The rejections of claims 23 and 25 are respectfully traversed.

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a. Claim 1

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Matschke.

Claim 1, as amended, recites a sterilizer/disinfector for sterilizing or disinfecting an object, comprising a housing, a light source disposed within the housing, a light seal to block light output from the light source from exiting the housing, wherein the object forms part of the light seal, and *an optical device, triggered by detection of completion of the light seal to a certain degree, to enable light to be output from the light source.*

Matschke discloses a germicidal dryer for hands that has two portals which allow the hands and forearms to be extended into the chamber (Abstract). The chamber has a source of ultraviolet light (Abstract). A switch 24 is used to control operation of the ultraviolet light (col. 8, lines 27-29). If the switch 24 indicates that there are objects such as hands or arms in the working chamber 10, the ultraviolet light 14 is activated (col. 8, lines 27-31). The switch 24 operates by detecting interruption of light traveling between sensor and switch 24 and reflector 25 in light path 8.

As discussed during the interview, the switch 24 of Matschke does not detect completion of a light seal to a certain degree, as recited in claim 1. Rather, Matschke discloses detecting interruption of light traveling in light path 8 by an object in the working chamber 10. Indeed, switch 24, and in turn ultraviolet light 14, may be activated without regard to the degree of light sealing of the chamber (e.g., ultraviolet light 14 may be activated when a person with thin forearms inserts their hands into the working chamber 10, leaving substantial gaps between their arms and portals 26 and 27, or ultraviolet light 14 may be activated by an object placed into the working chamber that interrupts light traveling in light path 8 without contributing to the light seal).

In view of the foregoing, Matschke does not disclose or suggest a sterilizer/disinfector comprising an optical device, triggered by detection of completion of a light seal to a certain degree, to enable light to be output from a light source, as recited in claim 1. Although Examiner Chin reserved judgment as to whether claim 1 is allowable over Matschke, he indicated during the interview that the claim appears to distinguish. Withdrawal of the rejection of claim 1 is respectfully requested.

Claims 2-5 depend from claim 1 and are allowable for at least the same reasons as the independent claim.

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b. Claim 26

Claim 26 is rejected under 35 U.S.C. 102(b) as being anticipated by Matschke.

Claim 26, as amended, recites a sterilizer/disinfector for sterilizing or disinfecting an object, comprising a housing, an ultraviolet flash light source disposed within the housing, and *a lockout mechanism comprising an optical device located within the housing, wherein the lockout mechanism is adapted to prevent light from being output from the ultraviolet flash light source unless completion of a light seal to a certain degree has been detected.*

For reasons similar to those discussed in connection with claim 1, Matschke does not disclose or suggest a lockout mechanism comprising an optical device located within a housing, wherein the lockout mechanism is adapted to prevent light from being output from an ultraviolet flash light source unless completion of a light seal to a certain degree has been detected. Although Examiner Chin reserved judgment as to whether claim 26 as amended would allowable over Matschke, he indicated that the claim appears to distinguish. Withdrawal of the rejection of claim 26 over Matschke is respectfully requested.

Claim 27 depends from claim 26 and is allowable over Matschke for at least the same reasons as the independent claim.

c. Claim 23

Claim 23 is rejected under 35 U.S.C. 102(b) as being anticipated by Matschke.

Claim 23 recites a device comprising a housing having an opening for at least partially receiving an object, *at least one movable member, attached to the housing, the at least one movable member movable between an open position and a closed position*, an ultraviolet light source within the housing, and a detector that detects at least one of: (1) a degree of light sealing of the housing caused at least in part by the movable member, (2) the movable member being in the closed position, and (3) an object being located in a certain position at least partially within the housing, wherein, when the object is placed at least partially within the housing, the movable member is in the closed position, and the detector detects the at least one of (1) a degree of light sealing of the housing caused at least in part by the movable member, (2) the movable member being in the closed position, and (3) an object being located in a certain position at least partially within the housing, then the ultraviolet light source emits ultraviolet radiation to sterilize or disinfect the object.

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Matschke discloses a germicidal dryer for hands that has two portals 26 and 27 to allow insertion of the hands and arms into the working chamber 10 (Abstract; col. 6, lines 46-48). The portals have mounted on them plastic collars 28 and 29 to prevent eye contact with the interior of the working chamber 10 during an ultraviolet cycle (col. 6, lines 48-51). When arms are inserted into the portals 26 and 27, the plastic collars 28 and 29 also act to prevent substantial leakage of ultraviolet light outside the working chamber 10 (col. 6, lines 51-54).

As discussed during the interview, the plastic collars 28 and 29 are not moveable in any way. In view of the foregoing, Matschke does not disclose or suggest at least one movable member, attached to a housing, the at least one movable member being movable between an open position and a closed position. Although Examiner Chin reserved judgment as to whether claim 23 is allowable over Matschke, he indicated that he appreciated this distinction and would reexamine the Matschke reference in consideration of the same. Withdrawal of the rejection of claim 23 is respectfully requested.

Claim 24 depends from claim 23 and is allowable for at least the same reasons as the independent claim.

d. Claim 25

1. Rejection over Matschke

Claim 25 is rejected under 35 U.S.C. 102(b) as being anticipated by Matschke.

Claim 25 recites a device comprising a housing having an opening for at least partially receiving an object, *at least one movable member, attached to the housing, the movable member movable between an open position and a closed position*, an ultraviolet light source within the housing, and an actuator that prevents the ultraviolet light source from emitting ultraviolet radiation until an object is placed at least partially within the opening of the housing and the movable member is in its closed position.

As discussed in connection with claim 23, Matschke does not disclose or suggest at least one movable member, attached to a housing, the movable member being movable between an open position and a closed position. Although Examiner Chin reserved judgment as to whether claim 25 is allowable over Matschke, he indicated that he appreciated this distinction and would reexamine the Matschke reference in consideration of the same. Withdrawal of the rejection of

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claim 25 over Matschke is respectfully requested.

2. Rejection over Chu

Claim 25 is also rejected under 35 U.S.C. 102(b) as being anticipated by Chu.

Claim 25 recites a device comprising a housing having an opening for at least partially receiving an object, at least one movable member, attached to the housing, the movable member movable between an open position and a closed position, an ultraviolet light source within the housing, and *an actuator that prevents the ultraviolet light source from emitting ultraviolet radiation until an object is placed at least partially within the opening of the housing and the movable member is in its closed position.*

Chu discloses a toothbrush holder comprising means to support one or more toothbrushes and an ultraviolet light to kill germs present on the brush (Abstract). The support means 12 comprises a pivoting flap 28/26, which both holds the toothbrush and acts as a one way triggering switch to activate the UV light 16 (col. 2, lines 31-33). Thus, the UV light is activated when the toothbrush is pushed into the holder (col. 2, lines 27-31).

As discussed during the interview, the triggering switch 28 of Chu does not prevent the UV light source 16 from emitting ultraviolet light until the movable member is in a closed position. Rather, the pivoting flap 28/26 of Chu is in an *open* position when the UV light source 16 is activated. Further, it does not appear that the pivoting flap 28/26 of Chu would be *capable* of being in a closed position when the UV light source 16 is activated, because the toothbrush that it holds partially extends from the toothbrush holder and would prevent closure of the pivoting flap 28/26 while the toothbrush is being irradiated.

In view of the foregoing, Chu does not disclose or suggest an actuator that prevents an ultraviolet light source from emitting ultraviolet radiation until an object is placed at least partially within an opening of a housing and a movable member is in its closed position. Examiner Chin indicated that he would reexamine the Chu reference in consideration of the same. Withdrawal of the rejection of claim 25 over Chu is respectfully requested.

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V. Rejections Under 35 U.S.C. §103

Independent claim 11 was rejected under 35 U.S.C. 103(a) as being obvious over Matschke (U.S. Patent No. 5,498,394) in view of Clark (U.S. Patent No. 5,786,598) and Stevenson (U.S. Patent No. 2,814,081). Independent claim 18 was rejected under 35 U.S.C. 103(a) as being obvious over Matschke in view of Stevenson. Independent claim 26 was rejected under 35 U.S.C. 103(a) as being obvious over Whitehead (U.S. Patent No. 5,920,075) in view of Clark. Claims 11 and 26 have been amended to clearly distinguish over the prior art of record. The rejection of claim 18 is respectfully traversed.

a. Claim 11

Independent claim 11 was rejected under 35 U.S.C. 103(a) as being obvious over Matschke in view of Clark and Stevenson.

Claim 11, as amended, recites a sterilizer/disinfector, comprising a housing, a flash lamp disposed within the housing, and *one or more vanes each attached to the housing at a pivot point and rotatable about the pivot point, for actuating the flash lamp and blocking light emitted by the flash lamp from exiting the housing.*

The Examiner relies on the Stevenson reference for the teaching of one or more vanes pivotally attached to a housing. Stevenson discloses a hand sterilizer 2 housed in a cabinet having two apertures 33 for the hands of a user (col. 2, lines 13-14 and 58-59). Each aperture is normally closed by a flexible closure 36, preferably made of neoprene or a similar material, which is formed in the style of a self-closing tobacco pouch (col. 2, lines 59-62). When a hand is thrust into the closure 36, the flexible material gives way to permit the hand to pass into the cabinet (col. 2, lines 62-64). When the hand is withdrawn, the closure automatically re-covers the aperture (col. 2, lines 64-66).

As discussed during the interview, Stevenson does not disclose or suggest one or more vanes each attached to a housing at a pivot point and rotatable about the pivot point, as recited in claim 11. Rather, the flexible closure 36 of Stevenson is attached along the circumference of the aperture 33 and may be pushed inwardly from where it is attached.

In view of the foregoing, the combination of Matschke, Clark, and Stevenson does not disclose or suggest one or more vanes each attached to a housing at a pivot point and rotatable

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about the pivot point, as recited in claim 11. Although Examiner Chin reserved judgment as to whether claim 11 is allowable over the combination of Matschke, Clark, and Stevenson, he indicated that he appreciated this distinction and would reexamine the Stevenson reference in consideration of the same. Withdrawal of the rejection of claim 11 is respectfully requested.

Claim 12 depends from claim 11 and is allowable for at least the same reasons as the independent claim.

b. Claim 18

Independent claim 18 was rejected under 35 U.S.C. 103(a) as being obvious over Matschke in view of Stevenson.

Claim 18 recites a sterilizer/disinfector for sterilizing or disinfecting an object, comprising a housing, and *two or more vanes pivotally mounted to the housing*, wherein the vanes may interface to enclose a portion of the object during sterilization or disinfection.

The Examiner relies on the Stevenson reference for the teaching of two or more vanes pivotally mounted to the housing. However, as discussed during the interview, Stevenson does not disclose or suggest a plurality of vanes. Rather, Stevenson discloses a single, unitary flexible closure 36.

In view of the foregoing, the combination of Matschke, Clark, and Stevenson does not disclose or suggest two or more vanes pivotally mounted to a housing, as recited in claim 18. Although Examiner Chin reserved judgment as to whether claim 18 is allowable over the combination of Matschke, Clark, and Stevenson, he indicated that he appreciated this distinction and would reexamine the Stevenson reference in consideration of the same. Withdrawal of the rejection of claim 18 is respectfully requested.

c. Claim 26

Independent claim 26 was rejected under 35 U.S.C. 103(a) as being obvious over Whitehead in view of Clark.

As amended, claim 26 recites a sterilizer/disinfector for sterilizing or disinfecting an object, comprising a housing, an ultraviolet flash light source disposed within the housing, and a *lockout mechanism comprising an optical device located within the housing, wherein the lockout*

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*mechanism is adapted to prevent light from being output from the ultraviolet flash light source unless completion of a light seal to a certain degree has been detected.*

The Examiner relies on the Whitehead reference for the teaching of the lockout mechanism. Whitehead discloses a hand-held sterilization device having an electronic safety mechanism. The electronic safety mechanism includes both a switch lock circuit and a digital lock circuit that must be actuated to close an electric circuit and actuate the device (Abstract). However, Whitehead does not disclose a lockout mechanism comprising an optical device, wherein the lockout mechanism is adapted to prevent light from being output from an ultraviolet flash light source unless completion of a light seal to a certain degree has been detected, as recited in amended claim 26.

In view of the foregoing, withdrawal of the rejection of claim 26 in view of Whitehead and Clark is respectfully requested.

Claim 27 depends from claim 26 and is allowable over the combination of Whitehead and Clark for at least the same reasons as the independent claim.



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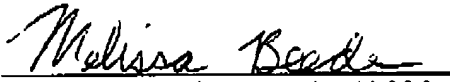
**CONCLUSION**

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. A check is not enclosed, but a fee is believed to be due. Please charge any fees occasioned by this response, including an extension fee to Deposit Account No. 23/2825.

Respectfully submitted,  
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